

Chapter 4

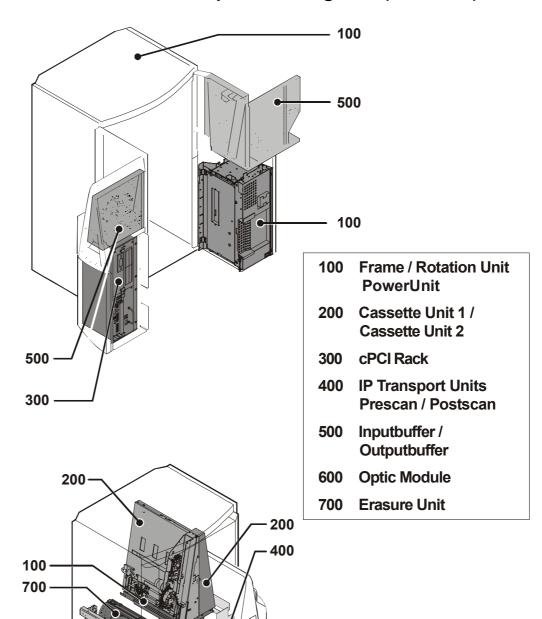
List of Contents

A	identification Diagrams1
1	Units of the ADC Compact Plus Digitizer (Overview)1
2	Frame / Rotation Unit (Assembly No. 100)2
3	Power Unit (Assembly No. 100)4
4	Cassette Modul 1 (Assembly No. 200)6
5	Cassette Modul 2 (Assembly No. 200)
6	cPCI – Rack (Assembly No. 300)10
7	IP – Transport Unit Prescan (Assembly 400)12
8	IP – Transport Unit Postscan (Assembly 400)14
9	Input Buffer (Assembly 500)16
10	Output Buffer (Assembly 500)18
11	Operation Terminal (Assembly 500)20
12	Optic Module - Top View (Assembly 600)22
13	Optic Module – Bottom View (Assembly 600)24
14	Erasure Unit (Assembly 700)26
В	Circuit Diagrams of ADC Compact Plus Digitizer27



A Identification Diagrams

1 Units of the ADC Compact Plus Digitizer (Overview)

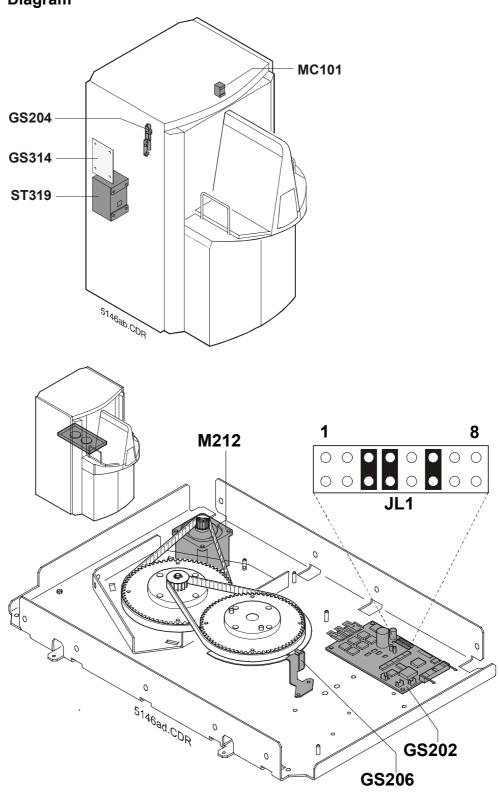


600

400



2 Frame / Rotation Unit (Assembly No. 100)

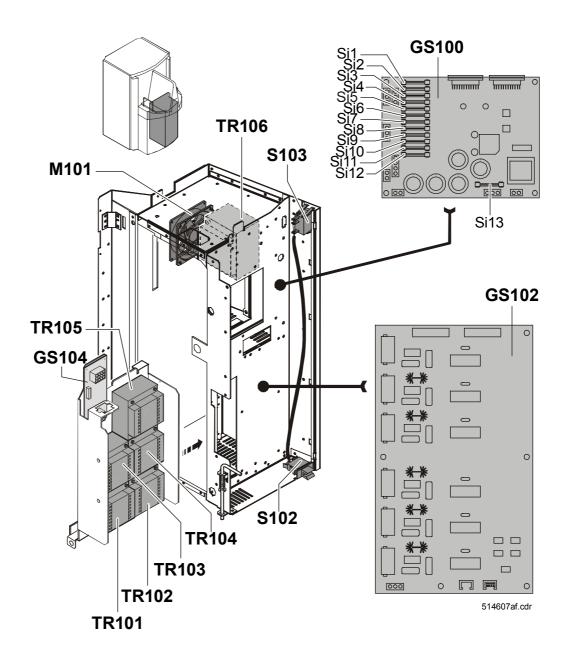




Ass.	Abbre-viation	Designation (also used by Diagnosis Mode)	Function	Circuit diagram page/ coord.
100	GS202	ROTATION-BD	Rotation unit stepper motor control board	2/C1-E1
100	GS204	ROT-WORKPOS- LS	Rotation unit workposition (light barrier)	2/F1
100	GS206	ROTAT-O-POS-LS	Rotation unit home- position (light barrier)	2/F1
100	MC101	LINE-FILTER	2-phase line filter for power supply	1/A6-B6
100	M212	ROTATION DRIVE	Motor for rotation unit	2/B1
300	GS314	IOBUS-DISTRIB. (see pages 10/11)	I/O-BUS distributor board	3/G5–G6
300	ST319	ETHERNET (see pages 10/11)	Ethernet connector	3/H2



3 Power Unit (Assembly No. 100)





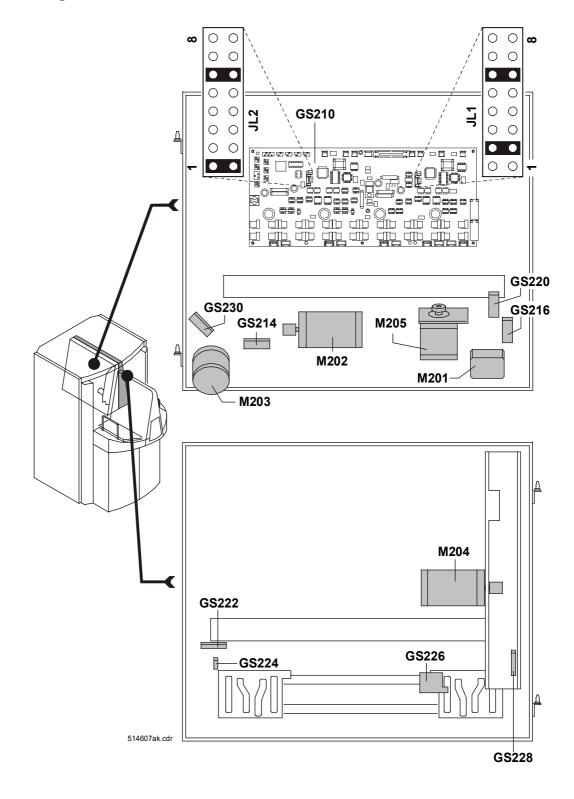
Ass.	Abbre- viation	Designation (also used by Diagnosis Mode)	Fuse	Quality
100	GS100	M-S-BOARD	SI 1 SI 2 SI 3 SI 4 SI 5 SI 6 SI 7 SI 8 SI 9 SI 10 SI 11 SI 12 SI 13	T 2.5A T 2.5A T 2.5A T 1A T 1A T 1A T 1A T 1A T 1A T 1A T 1

→M-S_Board on circuit diagram page 1, coord.B/C1 – B/C4

Ass.	Abbre- viation	Designation (also used by Diagnosis Mode)	Function	Circuit diagram page/ coord.
100	TR101	Transformer	Erasure Transformer Unit	1/F5
100	TR102	Transformer	Erasure Transformer Unit	1/F4
100	TR103	Transformer	Erasure Transformer Unit	1/F4
100	TR104	Transformer	Erasure Transformer Unit	1/F3
100	TR105	Transformer	Erasure Transformer Unit	1/F2
100	TR106	Transformer	Erasure Transformer Unit	1/F2
100	GS102	ERASURE-CTRL- BD	Erasure control board	1/E1-E6
100	GS104	CURRENT-SENSE	Current Sense Board for Erasure Unit	1/H3–H4
100	M101	POWER-UNIT-FAN	Power Unit Fan	1/D1
100	MC101	LINE FILTER	2-phase Line Filter	1/A6-B6
100	S102	INTERLOCK	Safety switch	1/D6
100	S103	MAIN SWITCH	Main Switch	1/C6



4 Cassette Module 1 (Assembly No. 200)

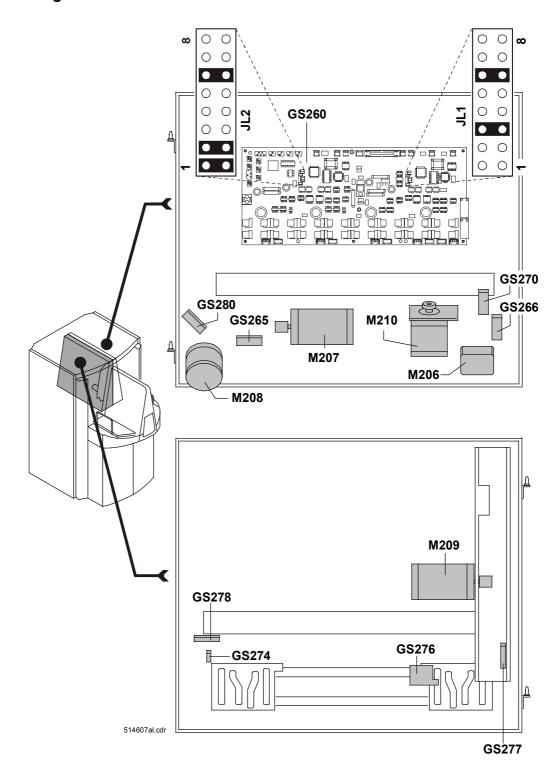




Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
200	M201	CASS1-ROLLER- MOT	Cassette Module 1: Roller Motor	2/B2-B3
200	M202	CASS1-LIFT-MOT	Cassette Module 1: Lift Motor	2/C2–C3
200	M203	CASS1-CLAMP- MOT	Cassette Module 1: Clamp Motor	2/D2–D3
200	M204	CASS1-OPENER- MOT	Cassette Module 1: Opener Motor	2/B2-B3
200	M205	CASS1-BELT-MOT	Cassette Module 1: Belt Motor	2/D2–D3
200	GS210	5FOLD-ST-CASS1	Cassette Module 1: 5fold stepper motor board	2/B4-E5
200	GS214	CASS1-LIFT-O-LS	Cassette Module 1: Lift- homeposition (light barrier)	2/D6
200	GS216	CASS1-IN-DET-LS (receiver)	Cassette Module 1: Cassette Detection (light barrier)	2/C6
200	GS220	CASS1-BELT-O-LS	Cassette Module 1: Belt- homeposition (light barrier)	2/E6
200	GS222	CASS1-IN-DET-LS (transmitter)	Cassette Module 1 Cassette Detection (light barrier)	2/B6-C6
200	GS224	CASS1-CLAMP-O- LS	Cassette Module 1: Clamp-homeposition (light barrier)	2/D6
200	GS226	CASS1-SWITCH	Cassette Module 1: Cassette Stop Switch	2/B6
200	GS228	CASS1-OPEN-O- LS	Cassette Module 1: Open-homeposition (light barrier)	2/B6
200	GS230	CASS1-CLAMP-LS	Cassette Module 1: Clamp-position (light barrier)	2/C6



5 Cassette Module 2 (Assembly No. 200)

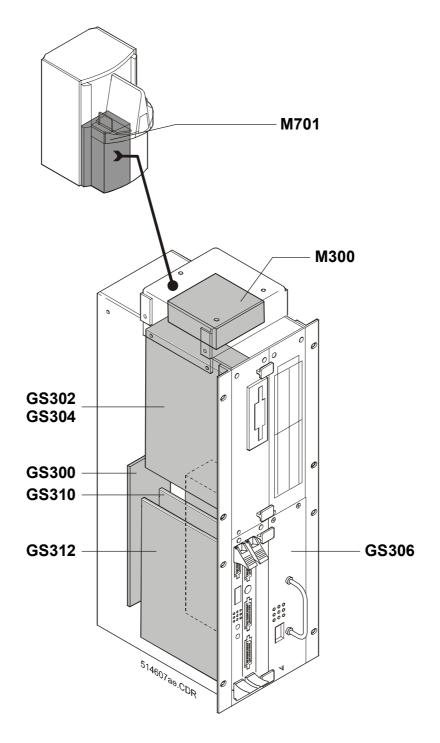




Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
200	M206	CASS2-ROLLER- MOT	Cassette Module 2: Roller Motor	2/F2-F3
200	M207	CASS2-LIFT-MOT	Cassette Module 2: Lift Motor	2/G2–G3
200	M208	CASS2-CLAMP- MOT	Cassette Module 2: Clamp Motor	2/H2–H3
200	M209	CASS2-OPEN-MOT	Cassette Module 2: Opener Motor	2/F2–F3
200	M210	CASS2-BELT-MOT	Cassette Module 2: Belt Motor	2/H2–H3
200	GS260	5FOLD-ST-CASS2	Cassette Module 2: 5fold stepper motor board	2/F4-H5
200	GS265	CASS2-LIFT-O-LS	Cassette Module 2: Lift-homeposition (light barrier)	2/H6
200	GS266	CASS2-IN-DET-LS (receiver)	Cassette Module 2: Cassette Detection (light barrier)	2/G6
200	GS270	CASS2-BELT-O-LS	Cassette Module 2: Belt- homeposition (light barrier)	2/H6
200	GS274	CASS2-CLAMP-O- LS	Cassette Module 2: Clamp-homeposition (light barrier)	2/H6
200	GS276	CASS2-SWITCH	Cassette Module 2: Cassette Stop Switch	2/F6
200	GS277	CASS2-OPEN-O- LS	Cassette Module 2: Open-homeposition (light barrier)	2/F7
200	GS278	CASS2-IN-DET-LS (transmitter)	Cassette Module 2: Cassette Detection (light barrier)	2/F6-G6
200	GS280	CASS2-CLAMP-LS	Cassette Module 2: Clamp-position (light barrier)	2/G6



6 cPCI – Rack (Assembly No. 300)

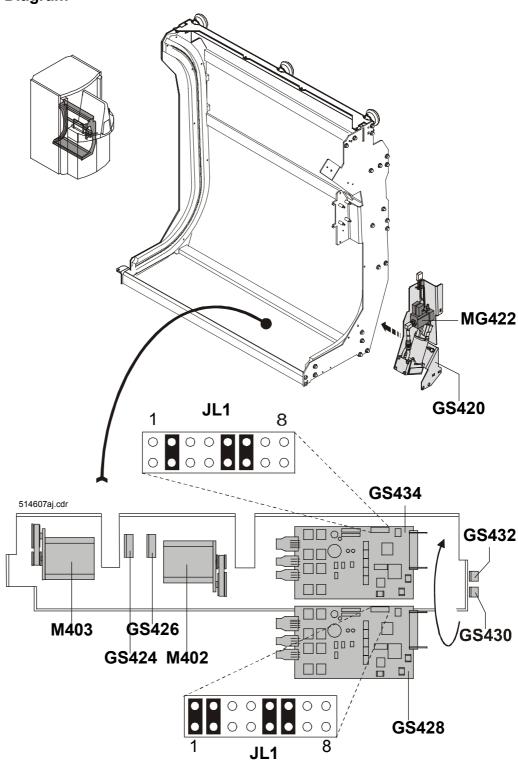




Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
300	M300	cPCI-RACK-FAN	cPCI-Rack: Fan	3/C6
300	GS300	BACKPLANE	cCPI-Rack: Backplane	3/D1-D6
300	GS302	HARDDISK	cCPI-Rack: Harddisk drive	3/B1-B2
300	GS304	FLOPPY	cCPI-Rack: Floppy drive	3/B2
300	GS306	cPCI-POWER	cCPI-Rack: Power unit	3/E6
300	GS310	SCAN-CTRL- MASTER	Scan Master Board	3/E2-E4
300	GS312	CPU-ARIEL	CPU-Ariel	3/E1-E2
300	GS314	IOBUS-DISTRIB (see pages 2/3)	I/O-BUS distributor board	3/G5–G6
300	ST319	ETHERNET (see pages 2/3)	Ethernet connector	3/H2
700	M701	ERASURE-UNIT- FAN (see pages 26/27)	Erasure Unit Fan	7/E2–F2



7 IP – Transport Unit Prescan (Assembly 400)

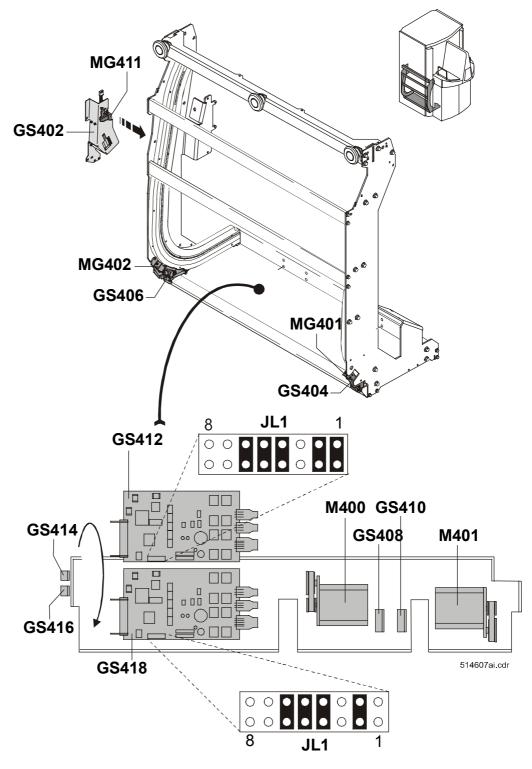




Ass.	Abbre- viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
400	M402	PRE-SUCT-DRIVE	Prescan suction motor	4/H3
400	M403	PRE-SLED-DRIVE	Prescan robot motor	4/H2
400	MG422	SOL-VALE-PRE	Solenoid valve - prescan	4/H5
400	GS420	PUMP-PRESC	Vacuum pump - prescan	4/H4-H5
400	GS424	PRE-SUC-POS-LS	Suction position – prescan (light barrier)	4/E3-F3
400	GS426	PRESC-SUCT-O- LS	Suction homeposition – prescan (light barrier)	4/F3
400	GS428	PRE-SUCTION-BD	Prescan suction board	4/G2-H2
400	GS430	PRE-SLEDPOS-LS	Robot - workposition – prescan (light barrier)	4/E2–F2
400	GS432	PRESC-SLED-O- LS	Robot homeposition - prescan (light barrier)	4/F2
400	GS434	PRESCAN-SLED- BD	Prescan robot board	4/G1–H2



8 IP – Transport Unit Postscan (Assembly 400)

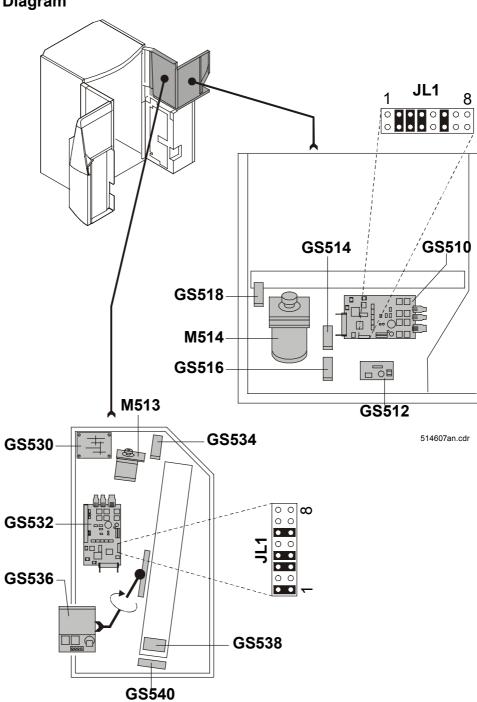




Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
400	M400	POST-SUCT-DRV	Postscan suction motor	4/D2
400	M401	POST-SLED-DRV	Postscan robot motor	4/D1
400	MG401	POINDS-MG-LEFT	Solenoid valve for parking position robot - left	4/A3
400	MG402	POINDS-MG- RIGHT	Solenoid valve for parking position robot - right	4/D3
400	MG411	SOL-VALE-POST	Solenoid valve – postscan	4/D5–E5
400	GS402	PUMP-POSTSC	Vacuum Pump - postscan	4/D4-D5
400	GS404	POINDS-LEFT-LS	Parking position for robot – left (light barrier)	4/A4
400	GS406	POINDS-RIGHT-LS	Parking position for robot – right (light barrier)	4/D4
400	GS408	POST-SUCT-POS- LS	Suction position - postscan (light barrier)	4/A2
400	GS410	POST-SUCT-O-LS	Suction homeposition (light barrier)	4/B2
400	GS412	POSTSC-SUCT-BD	Postscan suction board	4/C2-D2
400	GS414	POST-SLEDPOS- LS	Robot workposition - postscan (light barrier)	4/A1
400	GS416	POST-SLED-O-LS	Robot homeposition – postscan (light barrier)	4/B1
400	GS418	POST-SLED-BD	Postscan robot board	4/C1-D1



9 Input Buffer (Assembly 500)

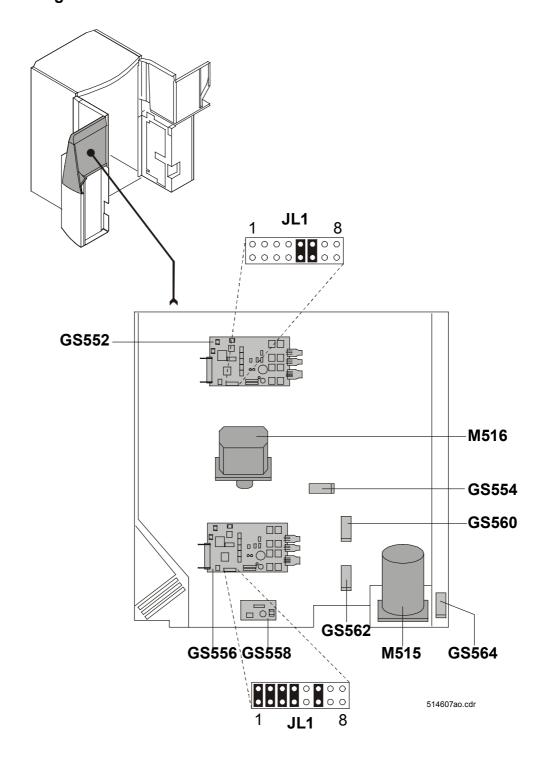




Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
500	M513	IBUFF-DOOR-DRV	Input buffer door motor	5/G3
500	M514	INBUFF-BLT-DRV	Input buffer belt motor	5/D3
500	GS510	INBUFF-BELT-BD	Input buffer belt board	5/D4-D5
500	GS512	INBUFF-CASS-DET	Input buffer cassette detection board	5/E5
500	GS514	INBUFF-CASS-DET (receiver)	Input buffer cassette detection (light barrier)	5/E6
500	GS516	INBUFF-CASS-DET (transmitter)	Input buffer cassette detection (light barrier)	5/D6-E6
500	GS518	INBUFF-BELT-LS	Input buffer belt-position (light barrier)	5/D6
500	GS530	EMERGENCY NODE	Emergency Node	5/H6
500	GS532	INBUFF-DOOR-BD	Input buffer door board	5/G4-G5
500	GS534	INBUFF-DOOR-LS	Input buffer door position (light barrier)	5/G6
500	GS536	RF-TAG-READER	RF-tag Reader	5/H3
500	GS538	RF-TAG-ANTENNA	RF-tag antenna	5/H4-H6
500	GS540	CASS-DOT-DET	Cassette Dot Detection (to recognize ADC cassettes)	5/F6



10 Output Buffer (Assembly 500)

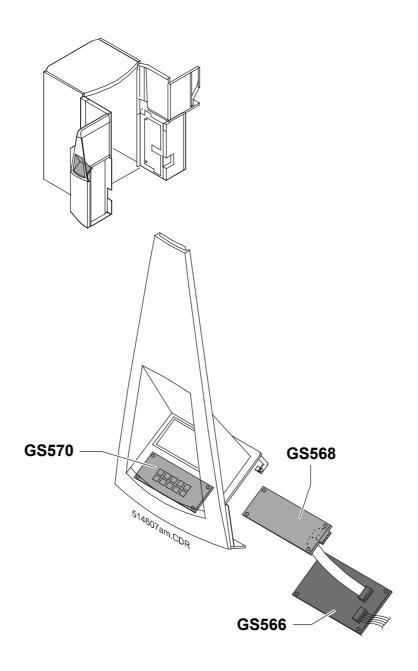




Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
500	M515	OUTB-ROLL-DRV	Output buffer roller drive motor	5/C3
500	M516	OUTB-PUSH-DRV	Output buffer push drive motor	5/A3
500	GS552	OUTBUFF-PUSH-BD	Output buffer push board	5/A4-A5
500	GS554	OUTBUFF-PUSH-LS	Output buffer push position (light barrier)	5/A6
500	GS556	OUTBUFF-ROLL-BD	Output buffer roller board	5/B4-C5
500	GS558	OBUFF-CASS-DET	Output buffer cassette Detection board	5/B5
500	GS560	OBUFF-CASS-DET (receiver)	Output buffer cassette detection (light barrier)	5/B6
500	GS562	OBUFF-CASS-DET (transmitter)	Output buffer cassette detection (light barrier)	5/A6
500	GS564	OUTBUFF-ROLL-LS	Output buffer roller position (light barrier)	5/C6



11 Operation Terminal (Assembly 500)

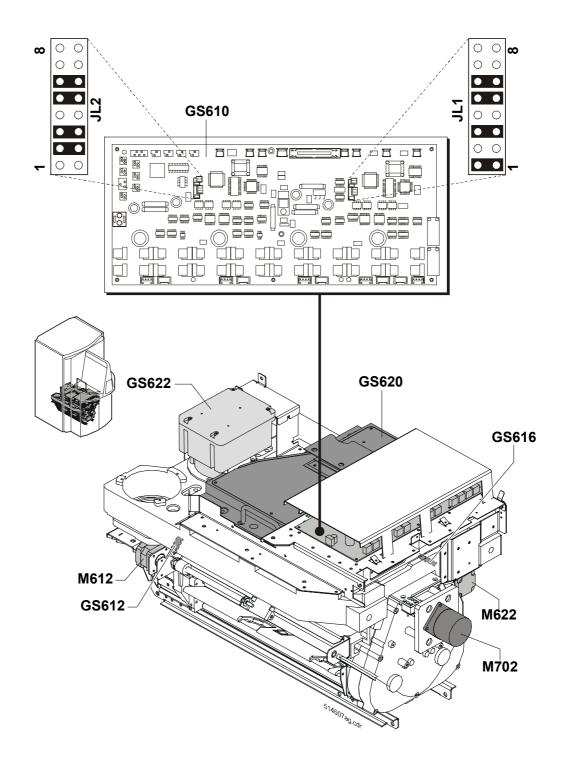




Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
500	GS566	LCD-TERMINAL- BD	LCD-Terminal Board	5/B1-B2
500	GS568	DISPLAY-LCD- MOD	Display LCD Module	5/A2
500	GS570	FLACHKEYBOARD	Keyboard	5/A1-B1



12 Optic Module – Top View (Assembly 600)

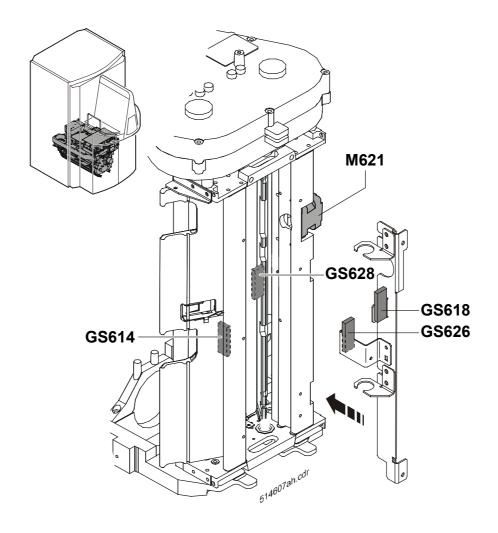




Ass.	Abbre- viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
600	M702	SLOWSCAN-DRV	Slowscan drive motor	6/E1
600	M612	POST-ALIGN-DRV	Postscan alignment drive motor	6/D1
600	M622	PRE-ALIGN-DRV	Prescan alignment drive motor	6/G1
600	GS610	5FOLD-ST-SCAN	5fold stepper motor board of scan unit	6/D3-H3
600	GS612	POST-ALIGN-LS	Postscan alignment position (light barrier)	6/D4-E4
600	GS616	PRE-ALIGN-LS	Prescan alignment position (light barrier)	6/H4
600	GS620	OPTIC MODUL	Optic Module	6/B1-B2
600	GS622	PM-TUBE	Photomultiplier Tube	6/B4-C4



13 Optic Module – Bottom View (Assembly 600)

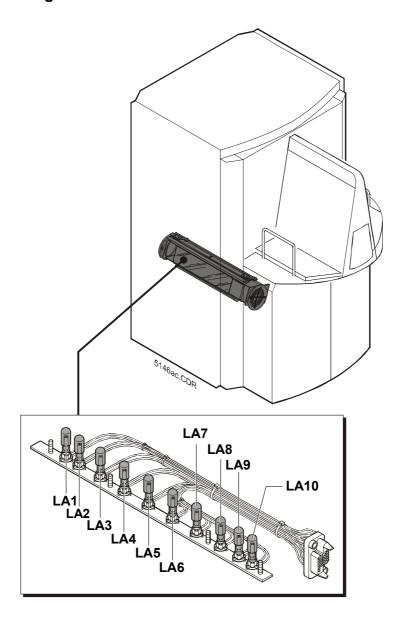




Ass.	Abbre-viation	Designation (also used by diagnosis mode)	Function	Circuit diagram page/ coord.
600	M621	ROLL-LIFT-DRV	Scan roller lift drive motor	6/H1
600	GS614	POST-IP-DET-LS	Postscan IP-detection (light barrier)	6/E4
600	GS618	ROLLER-LIFT-LS	Roller-Lift-Pos (Gap light barrier)	6/H4
600	GS626	BEGIN-O-SCAN-LS (transmitter)	Begin of scan position (light barrier)	6/F4
600	GS628	BEGIN-O-SCAN-LS (receiver)	Begin of scan position (light barrier)	6/G4



14 Erasure Unit (Assembly 700)



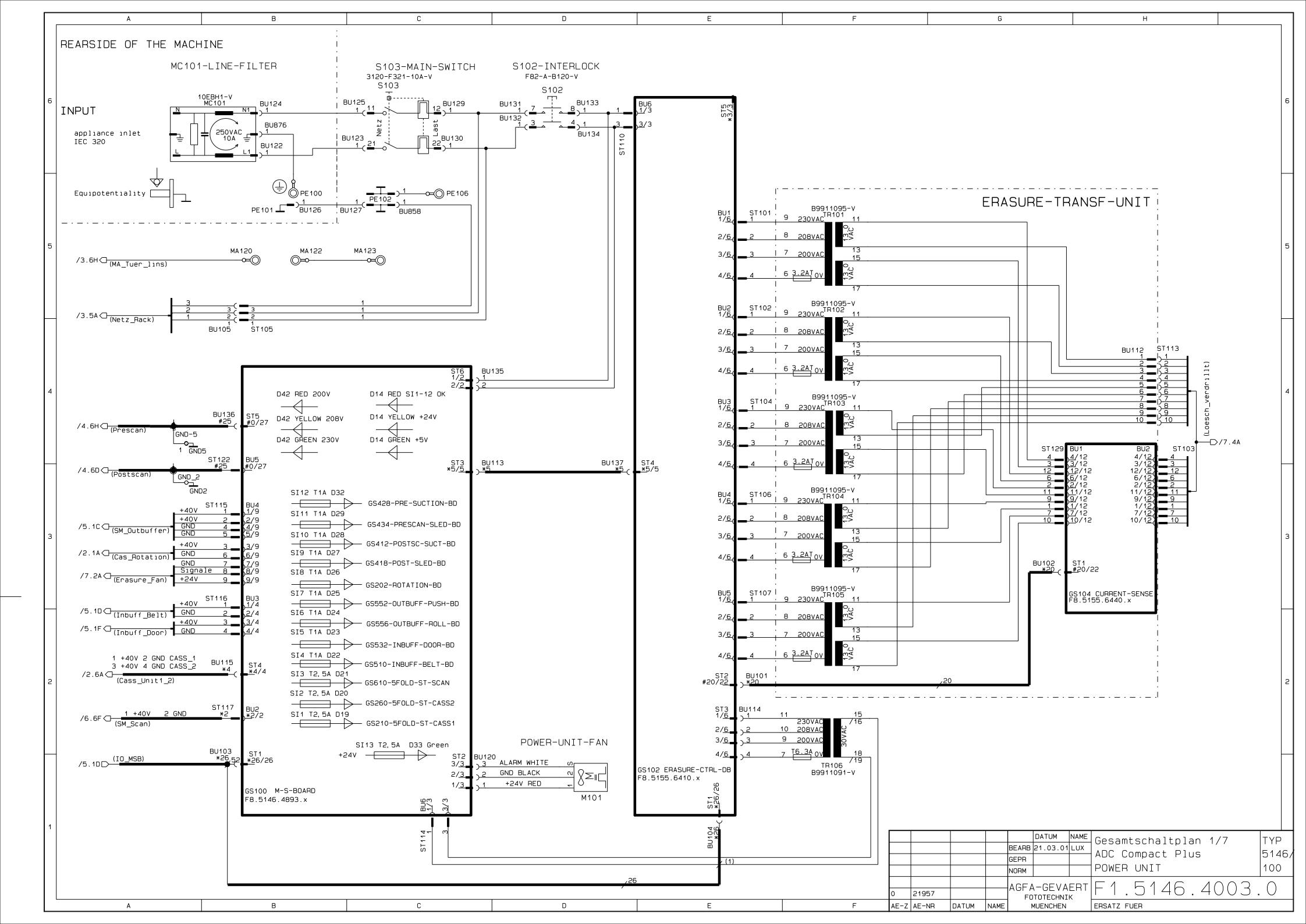


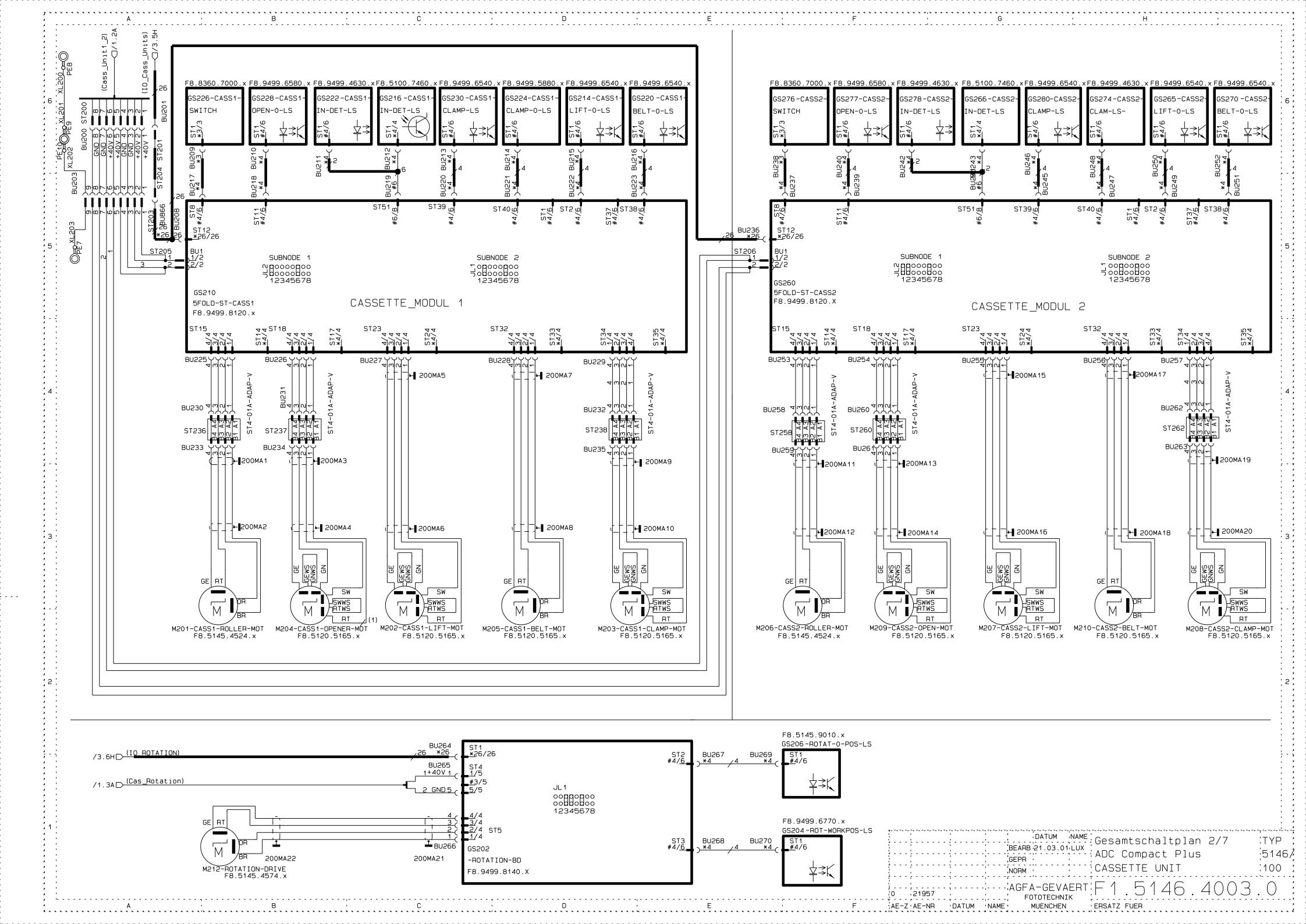
Ass.	Abbre-viation	Designation (also used by diagnosis Mode)	Function	Circuit diagram page/ coord.
700	LA1 – LA10		Lamps of the erasure unit	7/E5–H5
700	M701	ERASURE-UNIT-FAN (see pages 10/11)	Erasure Unit Fan	7/F2

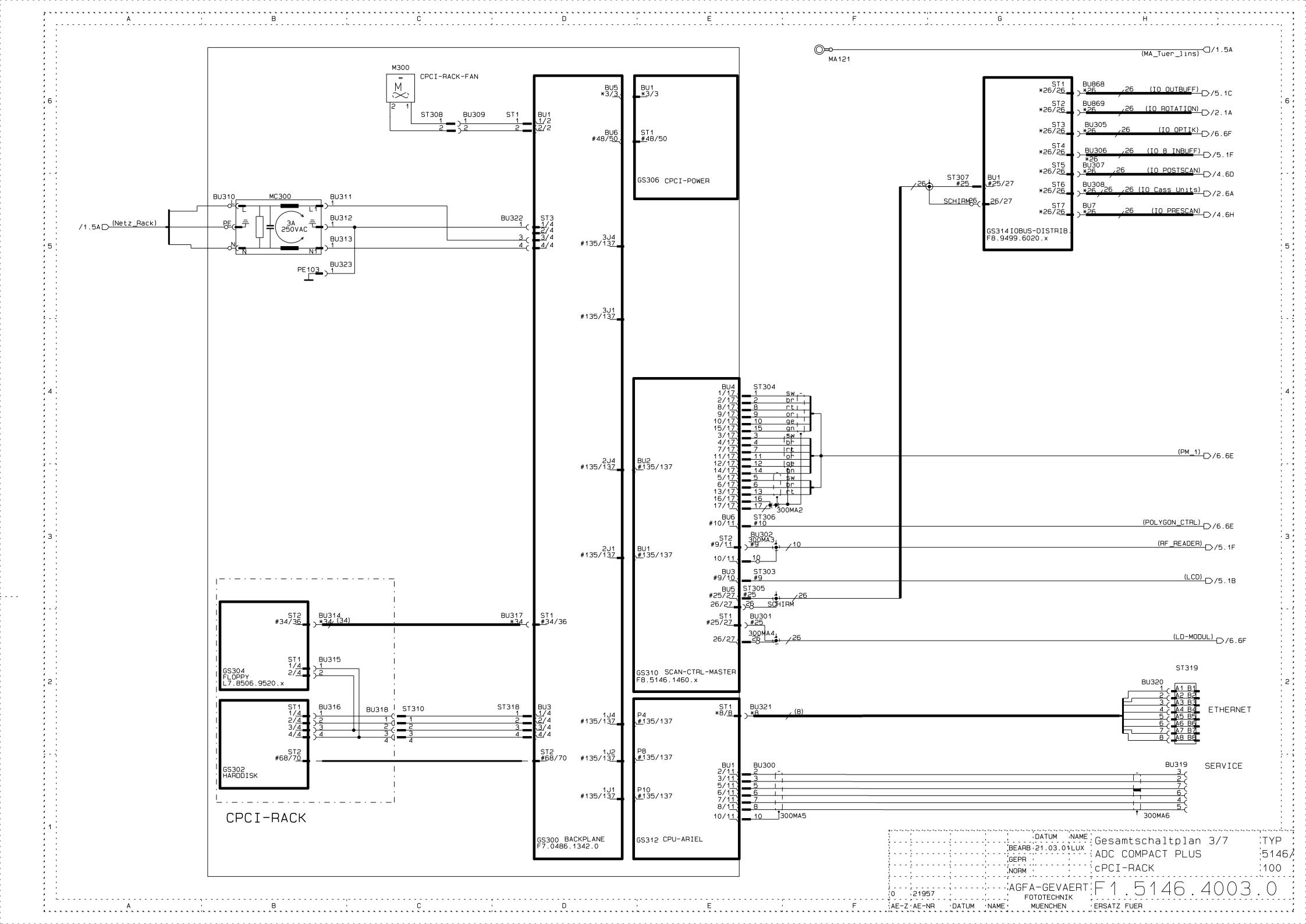
B Circuit Diagrams of ADC Compact Plus Digitizer

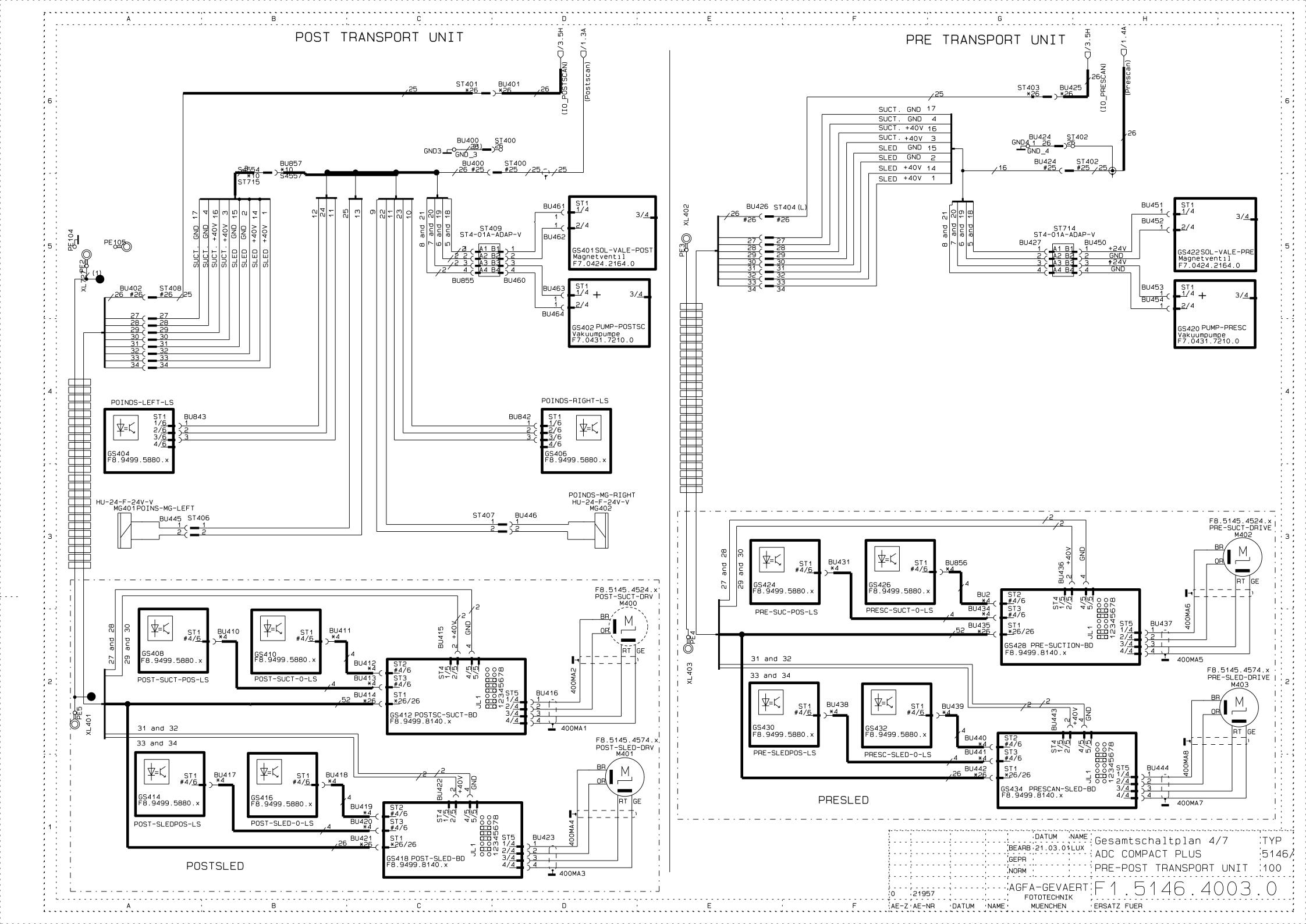
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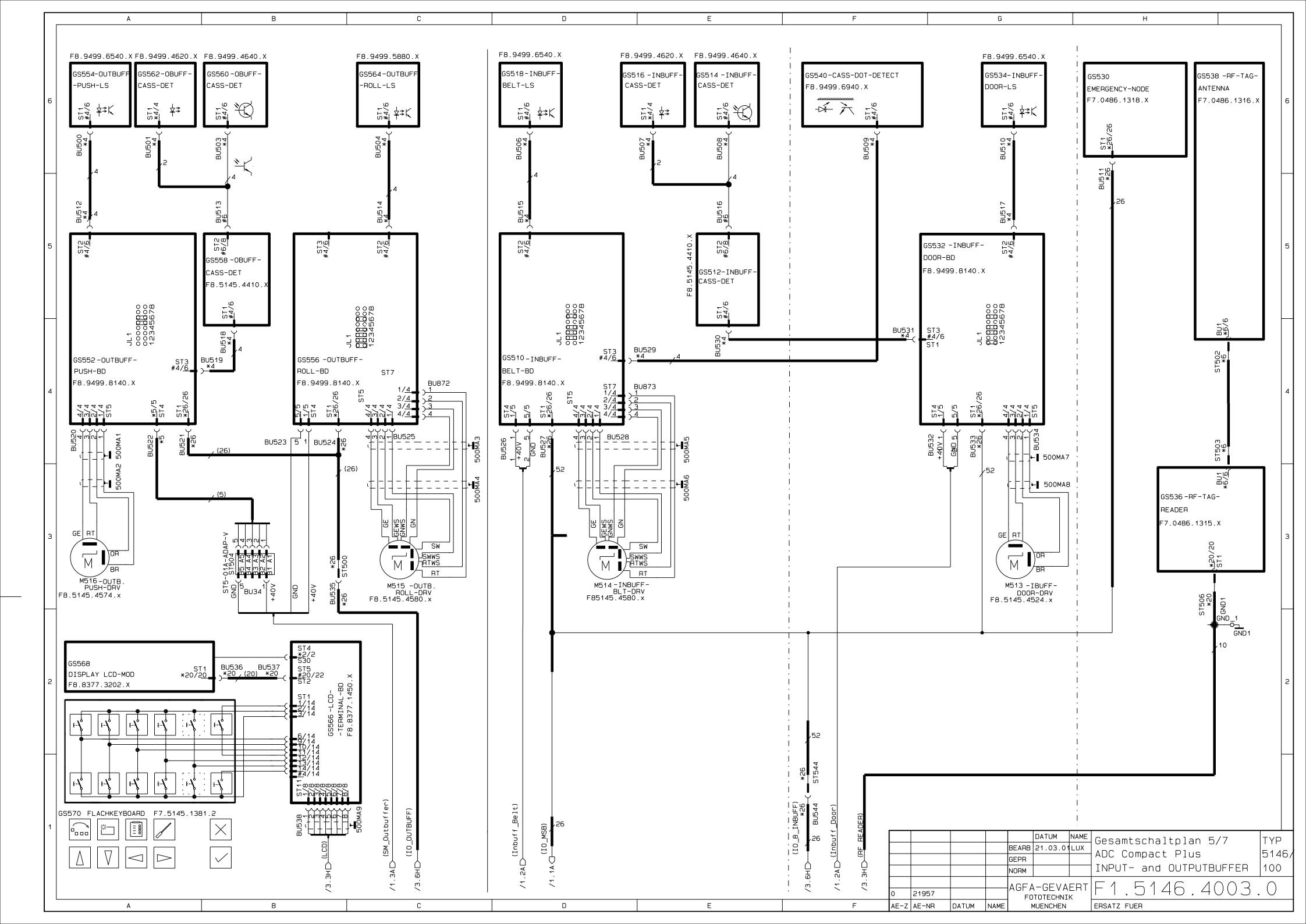
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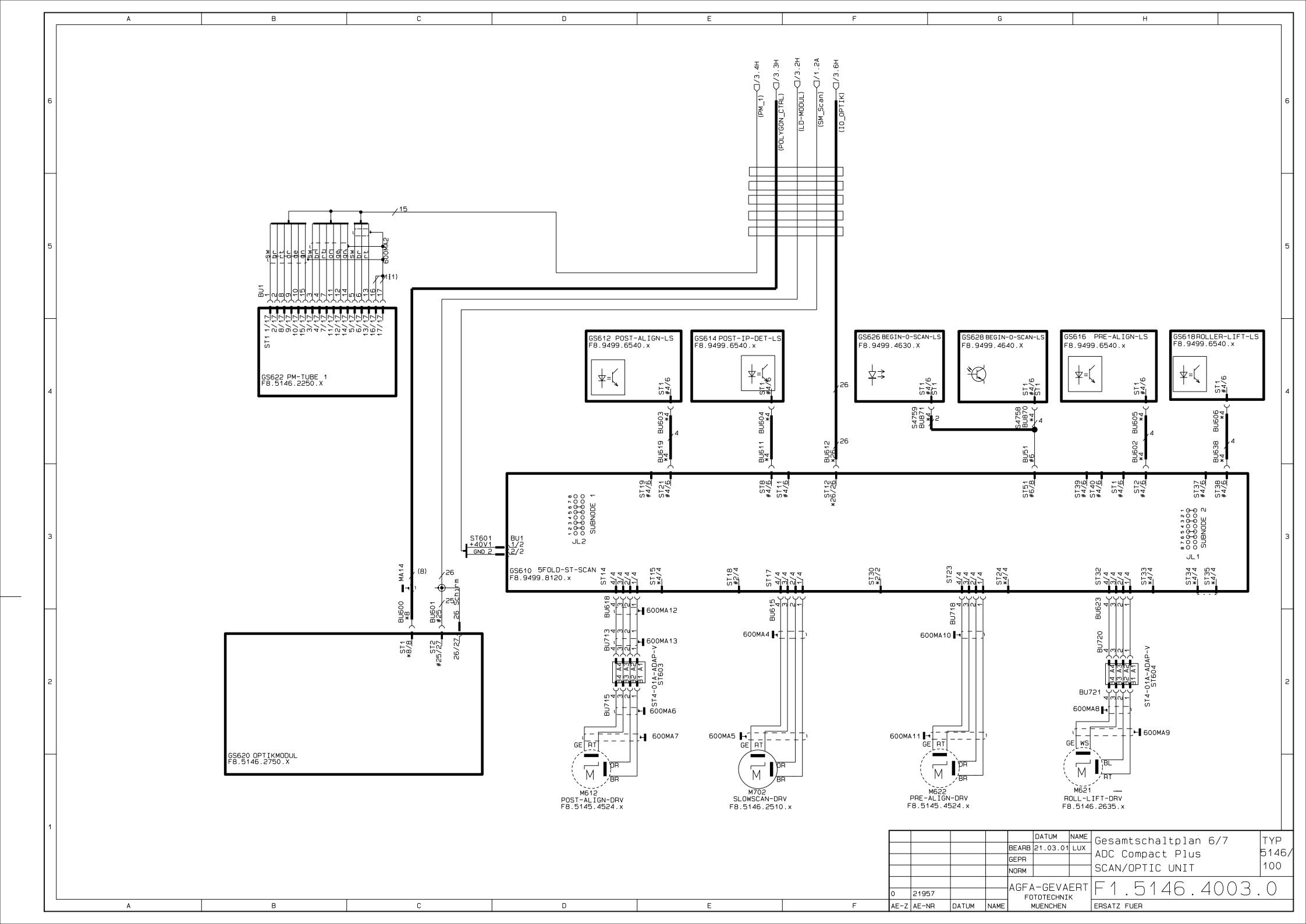


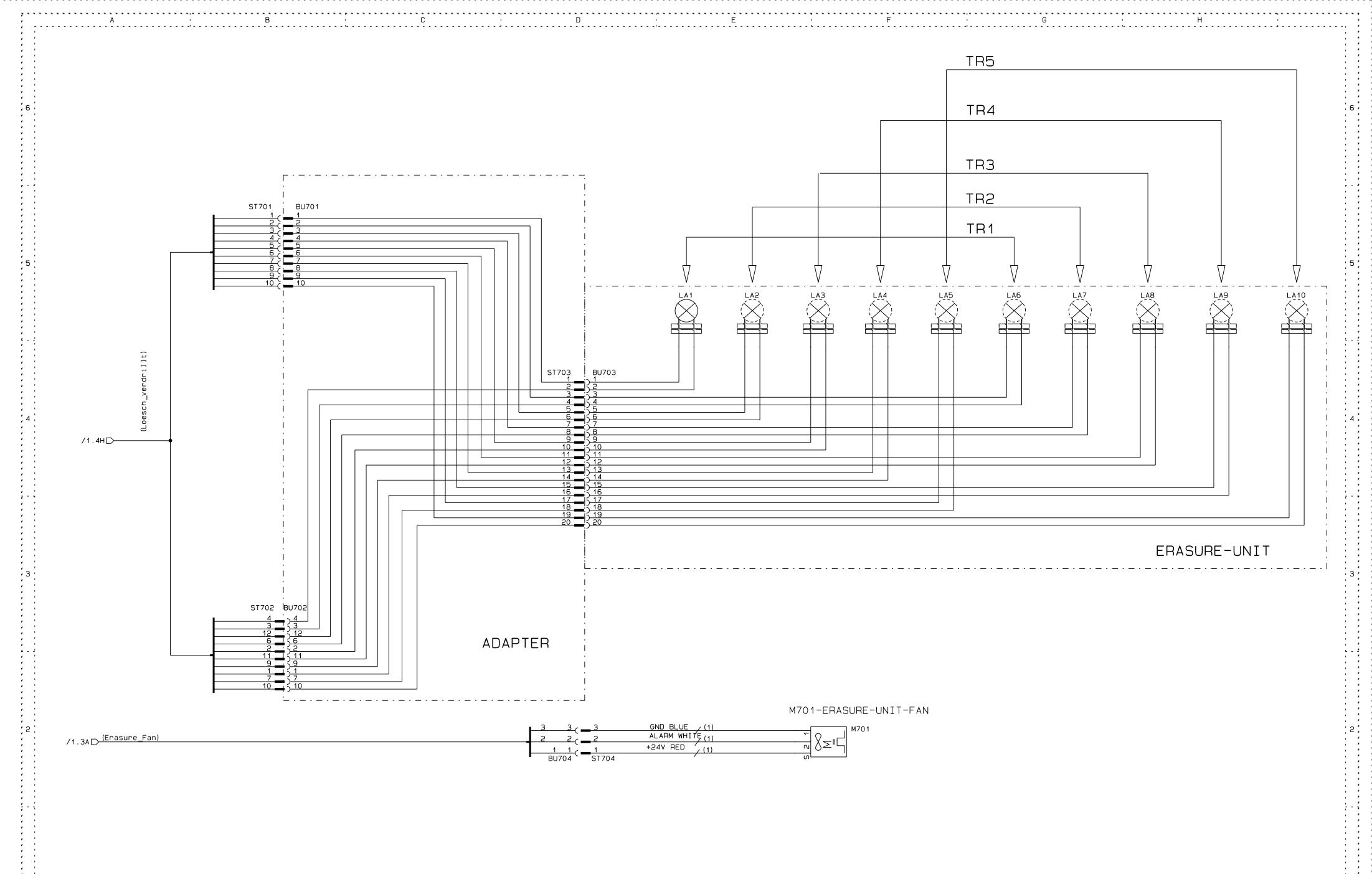












DATUM NAME Gesamtschaltplan 7/7 TYP
BEARB 21.03.01LUX ADC Compact Plus 5146/
INDRM ERASURE UNIT 700 100

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FOTOTECHNIK ERSATZ FUER